

4.12 IMPACTS ON COMMUNITY SERVICES AND FACILITIES

This section assesses the anticipated environmental effects of the Proposed Action and its alternatives on three types of community services and facilities: schools, public safety, and recreation facilities. Impacts on schools, public safety, and recreation would occur primarily as a result of: 1) population growth, and 2) additional revenue generation. Impacts on recreation would also occur as a result of the construction of recreational amenities in conjunction with the Proposed Action and its alternatives.

The primary ROI for schools and fire services/EMS is the three-county area of Hancock, Harrison, and Jackson Counties. The city of Biloxi and Harrison County are examined in greater detail because of the concentration of Mississippi's gaming industry within these areas. Three specific ROIs are used for recreation: 1) the Biloxi-Gulfport area, 2) the three-county region, and 3) water areas of the Back Bay and Mississippi Sound.

4.12.1 Impacts on School Facilities

The Proposed Action and its alternatives would generate increased funding to the public school districts of the city of Biloxi and Harrison County, improving per-pupil expenditure and student-per-teacher ratio. Improved per-pupil expenditure and student-per-teacher ratios can improve educational opportunities within the city of Biloxi and Harrison County (Nye, 1992a; Filby, 1980; Crampton, 1995; and Hedges et al., 1994).

Potential indirect impacts on the school systems in the ROI would result from population increases during the construction and operation phases of the Proposed Action or its alternatives that would affect the provision of school services and facilities in the ROI. During the construction phase of the Proposed Action or its alternatives, a small temporary population increase may occur (primarily within the city of Biloxi) due to the temporary presence of construction personnel and their families. This temporary population increase during the project's construction phase would not be expected to affect the provision of education services within the city of Biloxi and Harrison County. The project's operation would result in permanent population increases primarily within the city of Biloxi, with some related population increases occurring in the surrounding area.

A permanent population increase in the area would place additional demands on the Biloxi school system in particular as well as surrounding school districts. Public school districts in the three-county region are already faced with the challenge of accommodating a growing population. To address this need, most of the school districts have either recently completed expansion projects, are currently in the process of expansion, or have plans to expand capacity. Capacity within the school districts is expanded either through a combination of new facility construction, existing facility renovation and remodeling, or the use of portables (letter from H. Arledge, Superintendent, Harrison County Public School District, Gulfport, MS, to A. Batstone, EDW, Orlando, FL, October 20, 1999).

Alternatives 2, 3, 4, and 5

Table 4.12-1 projects the total school-age populations expected in Harrison County and the city of Biloxi for the years 2000 through 2010 as a result of Alternatives 2, 3, 4, and 5. Based on these projections, the school-age population is expected to increase by 4,409 students in Harrison County and by 1,385 students in the city of Biloxi. It should be noted that the school-age population identifies all school-age children within Harrison County and the city of Biloxi, and not only those students who attend public school.

Table 4.12-1
Projected School-Age Population – Alternatives 2, 3, 4, and 5

District	Year						
	1999	2000	2001	2002	2003	2004	
Harrison Co.	39,843	41,303	41,980	42,641	43,286	43,914	
Biloxi	10,859	11,429	11,616	11,799	11,977	12,151	
	2005	2006	2007	2008	2009	2010	1999 to 2010 Increase
Harrison Co.	44,527	44,483	44,433	44,378	44,318	44,252	4,409
Biloxi	12,321	12,309	12,295	12,279	12,263	12,244	1,385

Source: Staff analysis.

Alternatives 2, 3, 4, and 5 are programmed to introduce 420,000 square feet of additional casino space to the ROI. Increased gaming space would result in increased gaming tax revenues that would, in turn, generate increased funding for the school districts of Harrison County and the city of Biloxi.

As a result of Alternatives 2, 3, 4, and 5, casino tax revenues for Harrison County and the city of Biloxi public schools would be expected to increase for the years 2000 through 2010 over and above the revenues generated under the No-action Alternative, resulting in greater per-student expenditures. Increased gaming tax revenues generated by Alternatives 2, 3, 4, and 5 would allow the school districts of Harrison County and the city of Biloxi to continue improving graduation rates and student-per-teacher ratios, resulting in expanded educational opportunities (Nye, 1992a; Filby, 1980; Crampton, 1995; and Hedges et al., 1994).

No-Action Alternative

Under the No-action Alternative, the school-age population is expected to increase by 1,579 students in Harrison County and 603 students in the city of Biloxi between 1999 and 2010 (see Table 4.12-2). At the same time, some casino development is expected to occur, which would lead to some unknown contribution from gaming revenue to the public school system in Harrison County and the city of Biloxi beyond the current contribution trend.

Table 4.12-2
Projected School-Age Population – No-Action Alternative

District	Year						
	1999	2000	2001	2002	2003	2004	
Harrison Co.	39,843	41,303	41,448	41,588	41,724	41,855	
Biloxi	10,859	11,429	11,469	11,507	11,545	11,581	1999 to 2010 Increase
	2005	2006	2007	2008	2009	2010	
Harrison Co.	41,973	41,869	41,768	41,661	41,546	41,422	1,579
Biloxi	11,616	11,590	11,563	11,533	11,501	11,462	603

Source: Staff analysis.

Under the No-action Alternative, gaming tax revenues will continue to be contributed to the public school districts within Harrison County and the city of Biloxi. However, without the continuation of the current operation trends of the casino industry, the increase in school district funding per student may diminish. Subsequently, lower funding per student may lead to increases in the student-per-teacher ratio, diminished quality of education, and lower graduation rates within the school districts of Harrison County and Biloxi (Nye, 1992a; Filby, 1980; Crampton, 1995; and Hedges et al., 1994).

4.12.2 Impacts on Public Safety

Public safety services include police protection and fire services/EMS. The provision of fire and police protection are essential public services, especially with the advent of expanded casino facilities and the subsequent rise in both resident and visitor populations. The implementation of the Proposed Action or its alternatives would affect both the supply of, and the demand for, public safety services in terms of required personnel and increased funding opportunities. This analysis assesses the ability of public safety agencies within the ROI to sustain their current levels of service in the face of impacts associated with the Proposed Action and its alternatives.

The relationship between public safety personnel and population typically indicates that if the population increases without comparable increases in personnel, service levels would decline. However, if increases in the number of personnel were consistent with increases in population, service levels would remain constant. Public safety funding has a direct correlation with casino presence within Harrison County and the city of Biloxi. Because gaming tax revenues would increase as a result of additional casinos, public safety agencies would receive additional funding, allowing them to improve service.

Potential direct impacts to police services would occur if such services were affected by the construction or operation of the Proposed Action or its alternatives. The construction phase could increase opportunities for criminal activities; however, such activities would not be anticipated to require additional personnel or equipment over and above that currently maintained by the city of Biloxi (personal communication, B. Waterbury, Executive Director Coast Crime Commission, and A. Batstone, EDAW, Orlando, FL, October 21, 1999).

Table 4.12-5
Projected Police Personnel Demands – No-Action Alternative

District	Year					
	1999	2000	2001	2002	2003	2004
Harrison Co.	252	263	266	268	271	273
Biloxi	161	171	172	174	176	177
	2005	2006	2007	2008	2009	2010
Harrison Co.	276	278	280	282	285	287
Biloxi	179	180	182	183	185	186

Source: Staff analysis.

Table 4.12-6
Projected Fire Personnel Demands – No-Action Alternative

District	Year					
	1999	2000	2001	2002	2003	2004
Harrison Co.	109	114	115	116	117	118
Biloxi	112	118	119	121	122	123
	2005	2006	2007	2008	2009	2010
Harrison Co.	119	120	121	122	123	124
Biloxi	124	125	126	127	128	129

Source: Staff analysis.

Under the No-action Alternative, some additional casino development is anticipated to occur, which would increase gaming tax revenues for public safety by an unknown amount.

4.12.3 Impacts on Recreation

As with many other community facilities, the provision of recreation services is effectively measured by desired level of service. Level of service is established by a local recreation provider and describes the number of recreation facilities that should be provided on a per-capita basis. This level of service can be adjusted up or down based on local factors such as additional demands generated by tourists or increased supply generated by private recreation providers or the federal government. The development of a large, tourism-based project, such as the Proposed Action or its alternatives, would increase demands for recreation services both directly and indirectly. Direct demands would be placed upon the local recreation system by visitors to the proposed project, while demand would indirectly be placed upon the system by increased local and regional population generated by the project.

Potential direct impacts on recreation generated by the Proposed Action and its alternatives include impacts on the supply of marina slips, fishing piers, shoreline fishing opportunities, beach access, recreational boating opportunities, and funding for recreation. The increase in visitors to the region under each alternative would result in additional tourist demand for

1 recreational facilities and programs. This increase in demand for services would be most acute
2 in the immediate vicinity of the new accommodations. While creating additional demand for
3 recreational services, each alternative would also increase the supply of recreational amenities to
4 varying degrees, both locally and regionally. The proposed alternatives include recreational
5 enhancements ranging from marina slips to fishing piers to public shoreline fishing areas. These
6 enhancements would benefit casino guests as well as the general public. The development of the
7 Proposed Action or its alternatives would also result in a substantial contribution to the Tidelands
8 Trust Fund, which could be used by local jurisdictions for public access enhancements to
9 tidelands and the waters of the Gulf and the Mississippi Sound.

11 Potential indirect impacts on recreation generated by the Proposed Action and its alternatives
12 include impacts on shoreline fishing, beach access, recreational boating, charter boating and
13 fishing, community and regional recreation demand, and funding for recreation. Regional
14 population increases generated by the Proposed Action or its alternatives (described in Section
15 4.11) would create increased demand upon each of these recreational services. Conversely,
16 recreation funding could also increase due to increased tax revenue associated with the increased
17 population and induced development generated by the proposed development. However, local
18 governments would need to allocate these funds to recreational programs and enhancements in
19 order for improvements to be realized.

21 *Alternative 2*

23 Alternative 2 includes several recreational enhancements that would help meet tourist and
24 resident recreation demand. Alternative 2 includes substantial improvement of the existing golf
25 course at the Broadwater site, including a new clubhouse and enhancement of the existing greens
26 and fairways. Alternative 2 also includes the development of two new fishing piers, one boat
27 ramp, two acres of public open space, trails, bridges, boardwalks, and public access for shoreline
28 fishing and walking. The piers would be located on the breakwater, providing access to deeper
29 waters than most shoreline fishing and other piers in the area. This opportunity, coupled with the
30 development of shoreline fishing areas, would enhance public recreational fishing opportunities
31 in the region. As summarized in Table 4.12-7, Alternative 2 would result in the net gain of 282
32 marina slips. The new development would replace the 118 existing slips at the Broadwater site
33 with a new 400-slip marina.

Table 4.12-7
Changes in Number of Boat Slips Available, by Alternative

Alternative	Existing Slips	Slips Displaced or Lost	New Slips	Net Change in Number of Slips
Alternative 1	118	0	0	0
Alternative 2	118	118	400	+282
Alternative 3				
Site A*	287	287	90	-197
Site B	0	0	60	+60
Site C	0	0	100	+100
Site D	0	0	30	+30
Site E	0	0	100	+100
Site F	0	0	0	0
All Alt. 3 Sites	287	287	380	+93
Alternative 4	118	118	400	+282
Alternative 5	118	118	400	+282

Source: Staff analysis.

*Assumes that all slips at the existing Point Cadet Marina would be displaced by the new casino and marina development at Alternative 3 Site A.

The addition of approximately 7,500 hotel rooms at the Broadwater site, plus an increase in the general population and area tourism, would result in significant increased demand for beach access and charter boating and fishing, especially adjacent to the newly developed Broadwater site. In addition, increased traffic on Interstate 90 would hinder access to many beach areas for residents. This combination of additional demand for beach areas, coupled with more difficult access to existing beach areas, would lead to increased competition for beach areas that are near the principal accommodations, that afford easy access across Interstate 90, or that are especially popular. The demand for charters would likely occur at the Broadwater site in the vicinity of the new marina slips. The new marina slips and launch would help meet some of the increased charter demand.

As discussed in Sections 4.1 and 4.3, changes in circulation patterns under Alternative 2 could affect the shoreline on one or both sides of the Broadwater peninsula. In localized areas, these changes in circulation would result in increased accumulation of litter and debris on beaches adjacent to the peninsula and possibly increased odors. These factors may, under certain wind and circulation conditions, slightly degrade the experience of the average beach recreationist.

Increased population resulting from the Proposed Action or its alternatives would increase the demand for all recreation facilities in the ROI. Population projections for the time period between 2000 and 2010 indicate an increase of 6.8 percent for the Proposed Action and its alternatives over the No-action Alternative, corresponding to a 1.86 percent annual compound growth rate. To retain existing levels of service, additional opportunities and facilities would need to be developed commensurate with growth in population and demand. Community and specialized facilities and programs would experience moderate increases in demand due to regional population increases attributable to the Proposed Action or its alternatives. Recreation providers would need to address these through capital improvements in order to maintain current

1 levels of service. The current capacity of regional facilities and programs throughout the three-
2 county region is adequate to absorb the anticipated additional demand.

3
4 New funding opportunities would be available to local governments from two sources: the
5 Tidelands Trust Fund and increased tax revenues to city and county governments. The increased
6 level of funding would be significant, but so would the competing needs. Tidelands Trust Funds
7 could be used by local jurisdictions for coastal enhancement, including public access to tidelands
8 and the waters of the Gulf and the Mississippi Sound. Additional tax revenues would accrue to
9 cities and counties (as described in Section 4.11) and could be used for recreation programs,
10 facilities, and infrastructure.

11 12 *Alternative 3*

13
14 Alternative 3 includes recreational enhancements that would help meet tourist and resident
15 recreation demand; however, the enhancements under Alternative 3 are not as substantial as
16 those under Alternative 2. Alternative 3 would include the development of some new shoreline
17 fishing opportunities at Sites A, B, and C and the development of one new boat ramp as part of
18 marina development at one of the sites. The proposed configuration of Site A would result in the
19 closure of the existing Point Cadet Marina, which currently provides 287 recreational slips.
20 While the proposed new development at Site A would result in 90 new slips (see Table 4.12-7),
21 197 recreational slips would be lost at Site A, resulting in a net gain for Alternative 3 of only 93
22 slips.

23
24 The addition of approximately 7,500 hotel rooms at dispersed sites would result in similar
25 absolute tourist demand for recreational services as Alternative 2; however, under Alternative 3,
26 the demand would be more dispersed, occurring near the new accommodations. Increased
27 demand for charter boating and fishing, beach access, and shoreline fishing would occur around
28 the various sites. As with Alternative 2, increased traffic on Interstate 90 would hinder access to
29 many beach areas for residents. However, the traffic effects would be more diffused under
30 Alternative 3 than under Alternative 2.

31
32 Under Alternative 3, changes in circulation patterns, under certain wind conditions, could lead to
33 a slight increase in the accumulation of litter and debris on the Back Bay shoreline and possibly
34 increased odors in localized areas. These changes could slightly degrade the experience of
35 marina, boat ramp, and fishing piers users.

36
37 Because regional population increases generated by Alternatives 2, 3, 4, and 5 would be similar
38 (as described in Section 4.11), increased demand for community and regional recreation facilities
39 and programs under Alternative 3 would be similar to those described for Alternative 2. The
40 impacts on potential recreation funding through the Tidelands Trust Fund and through local tax
41 revenues would also be similar to those described for Alternative 2.

42 43 *Alternatives 4 and 5*

44
45 Alternatives 4 and 5 are similar to one another except for the specific recreational enhancements
46 included in the proposed developments. Both alternatives would include recreational

enhancements that would help meet tourist and resident recreation demand; however, Alternative 4 includes boardwalks, bridges, and trails, whereas Alternative 5 does not. Both alternatives would include the development of one new boat ramp, the net gain of 282 marina slips, and shoreline fishing opportunities. Total recreational enhancements under Alternatives 4 and 5 are greater than those under Alternative 3 but not as great as those under Alternative 2.

As with Alternative 2, the addition of approximately 7,500 hotel rooms at the Broadwater site under Alternatives 4 and 5 would result in a significant increase in demand for beach access, marina slips, fishing opportunities, and charter boating by tourists, especially near the Broadwater site. In addition, increased traffic on Interstate 90 would hinder access to many beach areas for residents. Increased tourist demand and increased traffic impacts would likely be concentrated around the Broadwater site rather than dispersed or diffused.

Under Alternatives 4 and 5, changes in circulation patterns could affect the shoreline on one or both sides of the Broadwater peninsula. In localized areas, these changes in circulation would result in increased accumulation of litter and debris on beaches adjacent to the peninsula and possibly increased odors, but not to the extent of Alternative 2. The occurrence of such accumulation is likely to be less under Alternative 5 than under Alternative 4. These factors may, under certain wind and circulation conditions, slightly degrade the experience of the average beach recreationist.

Because regional population increases generated by Alternatives 2, 3, 4, and 5 would be similar (as discussed in Section 4.11), increased demand for community and regional recreation facilities and programs under Alternatives 4 and 5 would be similar to those described for Alternative 2. The impacts on potential recreation funding through the Tidelands Trust Fund and through local tax revenues would also be similar to those described for Alternative 2.

No-Action Alternative

Under the No-action Alternative, there would be incremental increases in tourist demand generated by additional hotel rooms on the Biloxi peninsula. The demand for beach access, charters, and recreational boating and fishing opportunities would likely increase near these new accommodations due to tourist demand.

Under the No-action Alternative, there are few known recreation enhancements planned for trails, beach access, fishing piers, shoreline fishing, marina slips, recreational boating, or charter boating and fishing. Current shortages in marina slips, fishing piers, shoreline fishing opportunities, and boat ramps would continue and would increase with demand. Under the No-action Alternative, Tidelands Trust Funds contributions would continue annually with incremental increases due to new development. However, these gradual increases would not equal the immediate increases anticipated under Alternatives 2, 3, 4, or 5.

Under the No-action Alternative, under certain wind and circulation conditions, accumulation of litter and debris may occur on beaches adjacent to the Broadwater peninsula and may possibly be accompanied by increased odors. In localized areas, this accumulation would result in a slightly degraded beach experience for the average beach recreationist. Accumulations and odors under the No-action Alternative would be slightly less than under Alternative 5.

1
2 Population growth in the Biloxi-Gulfport area would place moderate strains on existing
3 recreation facilities and resources, especially those under local jurisdiction. Much of the current
4 demand for parks and recreation opportunities is being met only marginally. Local jurisdictions
5 report that they are underfunded and subject to increasing public demand for leisure services.
6 The city of Biloxi is endeavoring to meet the increasing needs of its local citizens through a
7 number of initiatives, including expansion of programs and development of new facilities.
8 Harrison County, on the other hand, is struggling to meet existing demands, and no new
9 initiatives are in place to meet anticipated future needs. Budgets generally have remained static,
10 and there are few funding sources available. From the perspective of local parks and recreation
11 programming, the existing infrastructure is not poised to adequately meet existing and future
12 demand for local recreational opportunities.

13
14 From a regional perspective, there is adequate capacity to meet existing and anticipated future
15 recreational demand for land-based recreation and for some elements of water-based recreation.
16 Unmet demands for boat slips and boat launches, especially in the Gulfport-Biloxi area, would
17 continue while consumptive and non-consumptive wildlife recreation, camping, and trail
18 opportunities are readily available from a variety of providers, especially in the three-county
19 region. In addition, existing beach areas and access areas are adequate in number and location to
20 accommodate both current use and anticipated future use under the No-action Alternative.

21 **4.12.4 Mitigation**

22
23
24 Proposed community facilities impacts attributable to the Proposed Action could be reduced if
25 the following mitigation measures were implemented:

- 26
27 • Ensure the provision of school facilities at the neighborhood planning level for any
28 new/redeveloped residential developments.
29
30 • Establish guidelines that determine the optimum number of police and fire personnel needed
31 to maintain public safety.
32
33 • Include public boat launches, parking, trailer parking, and other recreational amenities in the
34 proposed development. Provide a public boat launch and trailer parking in conjunction with
35 any marina being developed.
36
37 • Reconfigure Alternative 3, Site A to leave Point Cadet Marina intact by moving the casino to
38 the east side of the peninsula and siting the new 90-slip marina to the south of the casino.
39
40 • Encourage local recreation providers to use Tidelands Trust Funds to provide enhancements
41 to parks and recreation lands, facilities, and infrastructure.
42
43 • Institute a trash pick-up program to remove any increased litter from adjacent beaches.